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EXAMINER	
TAYLOR, BARRY W	
ART UNIT	**PAPER NUMBER**
2617	

NOTIFICATION DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/779,948	ELLIOTT, BRIG BARNUM	
	Examiner	Art Unit	
	Barry W. Taylor	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 April 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-23* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) _____ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

1. Claims 14-15 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sydon et al (2002/0085520 hereinafter Sydon) in view of Koorapaty et al (6,631,124 hereinafter Koorapaty).

Regarding claim 14. Sydon teaches a network comprising:

means for transmitting in the network the includes a plurality of nodes messages from more than one of the nodes using a plurality of modulation schemes (paragraph 0018, 0021, 0025); and

means for receiving in one of the nodes a plurality of the messages only during assigned timeslots schemes (paragraph 0018, 0021, 0025).

According to Applicants, Sydon does not teach defining when nodes can RECEIVE messages (see Applicants brief remarks starting at the top of page 10 and continuing to page 11 on paper dated 5/14/07 and repeated on page 11 of paper dated 11/2/07). Furthermore, Applicants contend that Sydon does not teach receiving in one of the nodes any of the messages from all of the other nodes in the plurality of nodes

transmitted to said one of the nodes only during a receiving timeslot assigned to said one the nodes (see Applicants remark on page 13, paper dated 4/21/08).

Koorapaty also teaches in a TDMA/CDMA environment and uses a High Penetration time slot when system is experiencing high demand (col. 6 lines 34-39) in order to optimize system resources (col. 3 lines 1-6). Koorapaty teaches assigning a High Penetration timeslot to multiple terminals so that the multiple terminals can send and receive messages on a single High Penetration timeslot when the system is experiencing a high demand (col. 6 lines 34-39, col. 7 lines 40-50).

It would have been obvious for any one of ordinary skill in the art at the time the invention was made to use the High Penetration timeslot as taught by Koorapaty into the teachings of Sydon in order to allow multiple terminals the ability to send and receive messages from one another when the system is experiencing high demand, as well as, optimizing system resources.

Regarding claim 15. Computer claim 15 is rejected for the same reasons as network claim 14 since the recited apparatus would perform the claimed program steps.

Regarding claim 19. Sydon teaches a node in a network of a plurality of nodes, said node comprising:

at least one transmitter configured to transmit to a destination node in said plurality of nodes using an assigned modulation scheme during a timeslot assigned to the destination node (paragraphs 0017-0018, 0020, 0021, 0025).

According to Applicants, Sydon does not teach a plurality of receivers configured to receive any messages from all other nodes … (see Applicants remark on page 15, paper dated 4/21/08).

Koorapaty also teaches in a TDMA/CDMA environment and uses a High Penetration time slot when system is experiencing high demand (col. 6 lines 34-39) in order to optimize system resources (col. 3 lines 1-6). Koorapaty teaches assigning a High Penetration timeslot to multiple terminals so that the multiple terminals can send and receive messages on a single High Penetration timeslot when the system is experiencing a high demand (col. 6 lines 34-39, col. 7 lines 40-50).

It would have been obvious for any one of ordinary skill in the art at the time the invention was made to use the High Penetration timeslot as taught by Koorapaty into the teachings of Sydon in order to allow multiple terminals the ability to send and receive messages from one another when the system is experiencing high demand, as well as, optimizing system resources.

2. Claims 1-13, 16-17, and 20-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sivakumar et al (2005/0018631 hereinafter Sivakumar) in view of Sydon et al (2002/0085520 hereinafter Sydon) further in view of Koorapaty et al (6,631,124 hereinafter Koorapaty).

Regarding claim 1. Sivakumar teaches a method of communicating among a plurality of nodes in a wireless network, comprising:

assigning a timeslot to each of the plurality of nodes in the wireless network, the timeslot being a time for a corresponding one of the plurality of nodes to receive messages transmitted by other of the plurality of nodes; assigning a modulation scheme to the each of the plurality of nodes (title, abstract, paragraphs 0010, 0020, 0024 – 0037, 0038 – 0042) .

Sivakumar does not show: transmitting a message from at least one of the other of the plurality of nodes, using the assigned modulation scheme, to at least one destination node within the plurality of nodes, the message being transmitted during a timeslot assigned to the at least one destination node; and receiving, at the at least one destination node, a message from the at least one of the other of the plurality of nodes. Sivakumar does not allow direct communication between slave nodes (see last two lines of paragraph 0020).

Sydon also teaches master node (12 figures 1-3) communication with remote units (14, 16, 18, 20 and 22 figures 1-3) using Bluetooth protocol (paragraphs 0017 - 19). Sydon further teaches direct communication between remote units (paragraphs 0020 – 023) as well as communication between multiple groups of remote units (paragraphs 0024 –0026) by using two modulation schemes (see frequency hopping or spread spectrum, paragraphs 0017 – 0018, 0021, 0025).

It would have been obvious for any one of ordinary skill in the art at the time of invention to use two modulation schemes as taught by Sydon into the teachings of Sivakumar in order to employ different modulation schemes to different connections or channels within a wireless network thereby reducing interference while optimizing usage

of available frequency spectrum as taught by Sydon (paragraphs 0006, 0007, 0018, 0021, 0025).

According to Applicants, Sivakumar and Sydon do not teach defining when nodes can RECEIVE messages (see Applicants brief remarks starting at the top of page 10 and continuing to page 14 on paper dated 5/14/07 and repeated on page 11 of paper dated 11/2/07). Furthermore, Applicants contend that Sydon does not teach transmitting the messages from all of the other of the plurality of nodes, using the assigned modulation scheme, to at least one destination node within the plurality of nodes (see Applicants remark on page 11, paper dated 4/21/08).

Koorapaty also teaches in a TDMA/CDMA environment and uses a High Penetration time slot when system is experiencing high demand (col. 6 lines 34-39) in order to optimize system resources (col. 3 lines 1-6). Koorapaty teaches assigning a High Penetration timeslot to multiple terminals so that the multiple terminals can send and receive messages on a single High Penetration timeslot when the system is experiencing a high demand (col. 6 lines 34-39, col. 7 lines 40-50).

It would have been obvious for any one of ordinary skill in the art at the time the invention was made to use the High Penetration timeslot as taught by Koorapaty into the teachings of Sivakumar in view of Sydon in order to allow multiple terminals the ability to send and receive messages from one another when the system is experiencing high demand, as well as, optimizing system resources.

Regarding claim 2. Sivakumar teaches the assigning comprises assigning one of a plurality of transmit spreading codes to each of the plurality of nodes (see Title,

abstract and Bluetooth protocol used in paragraph 0020). Koorapaty also teaches assigning spreading codes to separate users using the single High Penetration timeslot (col. 6 lines 34-39, col. 7 lines 40-50).

Regarding claim 3. Sivakumar teaches the assigning comprises assigning one of a plurality of hop sets to each of the plurality of nodes (see Frequency hopping spread spectrum in title, abstract and paragraphs 0001, 0003, 0010, 0020, 0024).

Regarding claim 4. Sydon teaches the assigning comprises assigning a unique transmit spreading code to each of the plurality of nodes (paragraphs 0018, 0021,0025).

Regarding claims 5-6. Sivakumar does not show communication between slave nodes (see last two lines of paragraph 0020).

Sydon also teaches master node (12 figures 1-3) communication with remote units (14, 16, 18, 20 and 22 figures 1-3) using Bluetooth protocol (paragraphs 0017 - 19). Sydon further teaches direct communication between remote units (paragraphs 0020 – 023) as well as communication between multiple groups of remote units (paragraphs 0024 –0026) by using two modulation schemes (see frequency hopping or spread spectrum, paragraphs 0017 – 0018, 0021, 0025).

It would have been obvious for any one of ordinary skill in the art at the time of invention to use two modulation schemes as taught by Sydon into the teachings of Sivakumar in order to employ different modulation schemes to different connections or channels within a wireless network thereby reducing interference while optimizing usage of available frequency spectrum as taught by Sydon (paragraphs 0006, 0007, 0018, 0021, 0025).

Applicants contend that Sydon does not teach transmitting the messages from all of the other of the plurality of nodes, using the assigned modulation scheme, to at least one destination node within the plurality of nodes (see Applicants remark on page 11, paper dated 4/21/08).

Koorapaty also teaches in a TDMA/CDMA environment and uses a High Penetration time slot when system is experiencing high demand (col. 6 lines 34-39) in order to optimize system resources (col. 3 lines 1-6). Koorapaty teaches assigning a High Penetration timeslot to multiple terminals so that the multiple terminals can send and receive messages on a single High Penetration timeslot when the system is experiencing a high demand (col. 6 lines 34-39, col. 7 lines 40-50).

It would have been obvious for any one of ordinary skill in the art at the time the invention was made to use the High Penetration timeslot as taught by Koorapaty into the teachings of Sivakumar in view of Sydon in order to allow multiple terminals the ability to send and receive messages from one another when the system is experiencing high demand, as well as, optimizing system resources.

Regarding claim 7. Sydon teaches orthogonal codes (paragraphs 0021, 0025). Koorapaty also teaches orthogonal codes (col. 6 lines 34-39, see orthogonal codes --- col. 6 line 67, col. 7 lines 40-50).

Regarding claim 8. Sydon teaches direct sequence (title, abstract, 0018, 0021, 0025). Koorapaty also teachings direct sequence CDMA (col. 7 lines 54-55).

Regarding claim 9. Sivakumar teaches ACK messages used (paragraph 0027).

Regarding claim 10. Sivakumar clearly shows hop sets and carrier frequencies (title, abstract, figures 1, 5 and 6) but does not teach node-to-node communication (see last two lines of paragraph 0020).

Sydon also teaches master node (12 figures 1-3) communication with remote units (14, 16, 18, 20 and 22 figures 1-3) using Bluetooth protocol (paragraphs 0017 - 19). Sydon further teaches direct communication between remote units (paragraphs 0020 – 023) as well as communication between multiple groups of remote units (paragraphs 0024 –0026) by using two modulation schemes (see frequency hopping or spread spectrum, paragraphs 0017 – 0018, 0021, 0025).

It would have been obvious for any one of ordinary skill in the art at the time of invention to use two modulation schemes as taught by Sydon into the teachings of Sivakumar in order to employ different modulation schemes to different connections or channels within a wireless network thereby reducing interference while optimizing usage of available frequency spectrum as taught by Sydon (paragraphs 0006, 0007, 0018, 0021, 0025).

Applicants contend that Sydon does not teach transmitting the messages from all of the other of the plurality of nodes, using the assigned modulation scheme, to at least one destination node within the plurality of nodes (see Applicants remark on page 11, paper dated 4/21/08).

Koorapaty also teaches in a TDMA/CDMA environment and uses a High Penetration time slot when system is experiencing high demand (col. 6 lines 34-39) in order to optimize system resources (col. 3 lines 1-6). Koorapaty teaches assigning a

High Penetration timeslot to multiple terminals so that the multiple terminals can send and receive messages on a single High Penetration timeslot when the system is experiencing a high demand (col. 6 lines 34-39, col. 7 lines 40-50).

It would have been obvious for any one of ordinary skill in the art at the time the invention was made to use the High Penetration timeslot as taught by Koorapaty into the teachings of Sivakumar in view of Sydon in order to allow multiple terminals the ability to send and receive messages from one another when the system is experiencing high demand, as well as, optimizing system resources.

Regarding claim 11. Sivakumar teaches a network (title, abstract) comprising:

a plurality of nodes, each of the nodes having an assigned modulation scheme (see Title, abstract and Bluetooth protocol used in paragraph 0020) and a plurality of receivers configured to receive a plurality of messages during a timeslot assigned to the node (title, abstract, figures 1, 5 and 6, paragraphs 0010, 0020, 0024 – 0037, 0038 – 0042).

Sivakumar does not allow direct communication between slave nodes (see last two lines of paragraph 0020).

Sydon also teaches master node (12 figures 1-3) communication with remote units (14, 16, 18, 20 and 22 figures 1-3) using Bluetooth protocol (paragraphs 0017 - 19). Sydon further teaches direct communication between remote units (paragraphs 0020 – 023) as well as communication between multiple groups of remote units (paragraphs 0024 –0026) by using two modulation schemes (see frequency hopping or spread spectrum, paragraphs 0017 – 0018, 0021, 0025).

It would have been obvious for any one of ordinary skill in the art at the time of invention to use two modulation schemes as taught by Sydon into the teachings of Sivakumar in order to employ different modulation schemes to different connections or channels within a wireless network thereby reducing interference while optimizing usage of available frequency spectrum as taught by Sydon (paragraphs 0006, 0007, 0018, 0021, 0025).

According to Applicants, Sivakumar and Sydon do not teach defining when nodes can RECEIVE messages (see Applicants brief remarks starting at the top of page 10 and continuing to page 15 on paper dated 5/14/07 and repeated on page 11 of paper dated 11/2/07). Furthermore, Applicants contend that Sydon does not teach a plurality of receivers configured to receive any messages transmitted from all other nodes in the plurality of nodes to each node during a timeslot assigned to the each node (see Applicants remark on page 13, paper dated 4/21/08).

Koorapaty also teaches in a TDMA/CDMA environment and uses a High Penetration time slot when system is experiencing high demand (col. 6 lines 34-39) in order to optimize system resources (col. 3 lines 1-6). Koorapaty teaches assigning a High Penetration timeslot to multiple terminals so that the multiple terminals can send and receive messages on a single High Penetration timeslot when the system is experiencing a high demand (col. 6 lines 34-39, col. 7 lines 40-50).

It would have been obvious for any one of ordinary skill in the art at the time the invention was made to use the High Penetration timeslot as taught by Koorapaty into the teachings of Sivakumar in view of Sydon in order to allow multiple terminals the

ability to send and receive messages from one another when the system is experiencing high demand, as well as, optimizing system resources.

Regarding claim 12. Sivakumar shows plurality of spread codes, carrier frequencies and plurality of hop sets (title, abstract, figures 1, 5, and 6).

Regarding claim 13. Sivakumar teaches (Bluetooth protocol --- paragraph 0020) having a plurality of spread codes, carrier frequencies, and hop sets (title, abstract, figures 1, 5, and 6).

Regarding claim 16. Sivakumar teaches receiving, by a node in a network during a TDMA timeslot assigned to the node for receiving messages transmitted (title, abstract, paragraphs 0010, 0020, 0024 – 0037, 0038 – 0042).

Sivakumar does not teach direct communication between a plurality of nodes where each of the other nodes transmitting messages to the node during the timeslot assigned to the node, each of the messages being transmitted using a different orthogonal or nearly orthogonal transmit spreading code.

Sydon also teaches master node (12 figures 1-3) communication with remote units (14, 16, 18, 20 and 22 figures 1-3) using Bluetooth protocol (paragraphs 0017 - 19). Sydon further teaches direct communication between remote units (paragraphs 0020 – 023) as well as communication between multiple groups of remote units (paragraphs 0024 –0026) by using two modulation schemes (see frequency hopping or spread spectrum, paragraphs 0017 – 0018, 0021, 0025).

It would have been obvious for any one of ordinary skill in the art at the time of invention to use two modulation schemes as taught by Sydon into the teachings of

Sivakumar in order to employ different modulation schemes to different connections or channels within a wireless network thereby reducing interference while optimizing usage of available frequency spectrum as taught by Sydon (paragraphs 0006, 0007, 0018, 0021, 0025).

According to Applicants, Sivakumar and Sydon do not teach defining when nodes can RECEIVE messages (see Applicants brief remarks starting at the top of page 10 and continuing to page 15 on paper dated 5/14/07 and repeated on page 11 of paper dated 11/2/07). Furthermore, Applicants contend that Sydon does not teach receiving, by a node in a network during a TDMA timeslot assigned to the node for receiving, any messages transmitted by all other nodes … (see Applicants remark on page 14, paper dated 4/21/08).

Koorapaty also teaches in a TDMA/CDMA environment and uses a High Penetration time slot when system is experiencing high demand (col. 6 lines 34-39) in order to optimize system resources (col. 3 lines 1-6). Koorapaty teaches assigning a High Penetration timeslot to multiple terminals so that the multiple terminals can send and receive messages on a single High Penetration timeslot when the system is experiencing a high demand (col. 6 lines 34-39, col. 7 lines 40-50).

It would have been obvious for any one of ordinary skill in the art at the time the invention was made to use the High Penetration timeslot as taught by Koorapaty into the teachings of Sivakumar in view of Sydon in order to allow multiple terminals the ability to send and receive messages from one another when the system is experiencing high demand, as well as, optimizing system resources.

Regarding claim 17. Sivakumar teaches a method for simultaneously receiving a plurality of messages in a wireless network node, the method comprising: receiving, by a node in a network during a TDMA timeslot assigned to the node for receiving messages transmitted (title, abstract, paragraphs 0010, 0020, 0024 – 0037, 0038 – 0042).

Sivakumar does not teach direct communication between the plurality of nodes (see last two lines in paragraph 0020) wherein each of the other nodes transmitting message during the timeslot assigned to the node, each of the messages being transmitted using a different carrier frequency.

Sydon also teaches master node (12 figures 1-3) communication with remote units (14, 16, 18, 20 and 22 figures 1-3) using Bluetooth protocol (paragraphs 0017 - 19). Sydon further teaches direct communication between remote units (paragraphs 0020 – 023) as well as communication between multiple groups of remote units (paragraphs 0024 –0026) by using two modulation schemes (see frequency hopping or spread spectrum, paragraphs 0017 – 0018, 0021, 0025).

It would have been obvious for any one of ordinary skill in the art at the time of invention to use two modulation schemes as taught by Sydon into the teachings of Sivakumar in order to employ different modulation schemes to different connections or channels within a wireless network thereby reducing interference while optimizing usage of available frequency spectrum as taught by Sydon (paragraphs 0006, 0007, 0018, 0021, 0025).

According to Applicants, Sivakumar and Sydon do not teach defining when nodes can RECEIVE messages (see Applicants brief remarks starting at the top of page 10 and continuing to page 15 on paper dated 5/14/07 and repeated on page 11 of paper dated 11/2/07). Furthermore, Applicants contend that Sydon does not teach receiving, by a node in a network during a TDMA timeslot assigned to the node for receiving, any messages transmitted by all other nodes … (see Applicants remark on page 14, paper dated 4/21/08).

Koorapaty also teaches in a TDMA/CDMA environment and uses a High Penetration time slot when system is experiencing high demand (col. 6 lines 34-39) in order to optimize system resources (col. 3 lines 1-6). Koorapaty teaches assigning a High Penetration timeslot to multiple terminals so that the multiple terminals can send and receive messages on a single High Penetration timeslot when the system is experiencing a high demand (col. 6 lines 34-39, col. 7 lines 40-50).

It would have been obvious for any one of ordinary skill in the art at the time the invention was made to use the High Penetration timeslot as taught by Koorapaty into the teachings of Sivakumar in view of Sydon in order to allow multiple terminals the ability to send and receive messages from one another when the system is experiencing high demand, as well as, optimizing system resources.

Regarding claims 20 and 22. Sivakumar in view of Sydon do not explicitly show same time slots used.

Koorapaty also teaches in a TDMA/CDMA environment and uses a High Penetration time slot when system is experiencing high demand (col. 6 lines 34-39) in

order to optimize system resources (col. 3 lines 1-6). Koorapaty teaches assigning a High Penetration timeslot to multiple terminals so that the multiple terminals can send and receive messages on a single High Penetration timeslot when the system is experiencing a high demand (col. 6 lines 34-39, col. 7 lines 40-50).

It would have been obvious for any one of ordinary skill in the art at the time the invention was made to use the High Penetration timeslot as taught by Koorapaty into the teachings of Sivakumar in view of Sydon in order to allow multiple terminals the ability to send and receive messages from one another when the system is experiencing high demand, as well as, optimizing system resources.

Regarding claim 21. Sivakumar teaches different time slots (see figures 1, 5 and 6).

Regarding claim 23. Sivakumar teaches an ad hoc, wireless network (see Bluetooth in abstract, figures 1-6, paragraph 0020), a method of communication amongst said nodes comprising:
assigning a modulation scheme to said each of said plurality of nodes (title, abstract, paragraphs 0010, 0020, 0024 – 0037, 0038 – 0042).

Sivakumar does not show direct communication between the plurality of nodes (see last two lines in paragraph 0020).

Sydon also teaches master node (12 figures 1-3) communication with remote units (14, 16, 18, 20 and 22 figures 1-3) using Bluetooth protocol (paragraphs 0017 - 19). Sydon further teaches direct communication between remote units (paragraphs 0020 – 023) as well as communication between multiple groups of remote units

(paragraphs 0024 –0026) by using two modulation schemes (see frequency hopping or spread spectrum, paragraphs 0017 – 0018, 0021, 0025).

It would have been obvious for any one of ordinary skill in the art at the time of invention to use two modulation schemes as taught by Sydon into the teachings of Sivakumar in order to employ different modulation schemes to different connections or channels within a wireless network thereby reducing interference while optimizing usage of available frequency spectrum as taught by Sydon (paragraphs 0006, 0007, 0018, 0021, 0025).

According to Applicants, Sivakumar and Sydon do not teach defining when nodes can RECEIVE messages (see Applicants brief remarks starting at the top of page 10 and continuing to page 15 on paper dated 5/14/07 and repeated on page 11 of paper dated 11/2/07). Furthermore, Applicants contend that Sydon does not teach transmitting said messages from at least one of said all other of said plurality of nodes … (see Applicants remark on page 16, paper dated 4/21/08).

Koorapaty also teaches in a TDMA/CDMA environment and uses a High Penetration time slot when system is experiencing high demand (col. 6 lines 34-39) in order to optimize system resources (col. 3 lines 1-6). Koorapaty teaches assigning a High Penetration timeslot to multiple terminals so that the multiple terminals can send and receive messages on a single High Penetration timeslot when the system is experiencing a high demand (col. 6 lines 34-39, col. 7 lines 40-50).

It would have been obvious for any one of ordinary skill in the art at the time the invention was made to use the High Penetration timeslot as taught by Koorapaty into

the teachings of Sivakumar in view of Sydon in order to allow multiple terminals the ability to send and receive messages from one another when the system is experiencing high demand, as well as, optimizing system resources.

3. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sivakumar et al (2005/0018631 hereinafter Sivakumar) in view of Abdesselem et al (2001/0022791 hereinafter Abdesselem) further in view of Koorapaty et al (6,631,124 hereinafter Koorapaty).

Regarding claim 18. Sivakumar teaches a method for communicating among a plurality of radios in a wireless network (title, abstract, figures 1-6), the method comprising:

using one of a plurality of transmit spreading codes to transmit a message from a radio to at least one other radios in a wireless network during a timeslot assigned to the at least one other nodes paragraphs 0010, 0020, 0024 – 0037, 0038 – 0042).

Sivakumar does not teach using very short bursts or pulses as defined as UWB (see Ultra-Wideband radio network defined at the top of page 21, paragraph 0081 of Applicants specifications).

Abdesselem also teaches a radio communication system that uses timeslots (Title, abstract, figures 1, 2, 3A, 3B, 4A and 4B). Abdesselem teaches using short burst to allow subscriber terminals to automatically set a frequency correction algorithm thereby resulting in faster synchronization to base stations (paragraphs 0001, 0013, 0019, 0021, 0035, 0037, 0042, 0047, 0056, 0058, 0059, 0062, 0064, 0065).

It would have been obvious for any one of ordinary skill in the art at the time of invention to use short burst as taught by Abdesselem into the teachings of Sivakumar in order to reduce the time necessary for a subscriber stations to synchronize to a cell as taught by Abdesselem (paragraphs 0064, 0065).

According to Applicants, Sivakumar and Abdesselem do not teach defining when nodes can RECEIVE messages (see Applicants brief remarks starting at the top of page 10 and continuing to page 15 of paper dated 5/14/07 and repeated on paper dated 11/2/07, page 16). Furthermore, Applicants contend that Sivakumar in view of Abdesselem fail to teach the timeslot being for receiving the messages from all of the other ... (see Applicants remark on page 15, paper dated 4/21/08).

Koorapaty also teaches in a TDMA/CDMA environment and uses a High Penetration time slot when system is experiencing high demand (col. 6 lines 34-39) in order to optimize system resources (col. 3 lines 1-6). Koorapaty teaches assigning a High Penetration timeslot to multiple terminals so that the multiple terminals can send and receive messages on a single High Penetration timeslot when the system is experiencing a high demand (col. 6 lines 34-39, col. 7 lines 40-50).

It would have been obvious for any one of ordinary skill in the art at the time the invention was made to use the High Penetration timeslot as taught by Koorapaty into the teachings of Sivakumar in view of Abdesselem in order to allow multiple terminals the ability to send and receive messages from one another when the system is experiencing high demand, as well as, optimizing system resources.

Response to Arguments

4. Applicant's arguments with respect to claims 1-23 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Barry W. Taylor, telephone number (571) 272-7509, who is available Monday-Thursday, 6:30am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dwayne Bost, can be reached at (571) 272-7023. The central facsimile phone number for this group is **571-273-8300**.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group 2600 receptionist whose telephone number is (571) 272-2600, the 2600 Customer Service telephone number is (571) 272-2600.

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/Barry W Taylor/
Primary Examiner, Art Unit 2617